OVERVIEW

> About the Diversity Institute

> The Business Case for Diversity

> DEI in Aerospace and Aviation

> The Way Forward

ABOUT THE DIVERSITY INSTITUTE

- Diversity Institute (DI) founded in 1999

- 100+ full-time researchers and staff

- 250+ industry and community partners

- $30 million+ in funding (over 4 years)

- Committed to social justice but grounded in "the business case" for diversity and inclusion

- Run 7 incubation projects and sponsor several others

- Named a "best practice" by UN Prime

- Led by former TMU (formerly Ryerson)

Women Entrepreneurship Knowledge Hub (WEKH): 10 regional hubs; Network of 250 organizations; 100,000 + diverse women entrepreneurs

Future Skills Centre: $260m investment to strengthen Canada's skills and employment ecosystem

Women in Technology (ORF-RE)

IRCC Innovative Service Delivery

DiversityLeads and 50/30 Challenge

OCC + "She-Covery"

THE BUSINESS CASE FOR DIVERSITY

Broaden the talent pool and overcome skills gaps

Respond to increasingly diverse communities and gain support from diverse stakeholders

**Foster innovation, creativity, and diverse thought**

Mitigate legal and reputational costs

Increase staff satisfaction

Expand the talent pool

- Immigrants: nearly **30%** of Canada's working age population by 2036

- **Racialized** groups: 40% by 2036

- **Indigenous youth** are the **fastest** growing segment

- **Women** are still **underemployed** with only **50%** of working age women **in full time employment** as compared to **64%** of men

- Persons with a disability: will increase from **2.9 million** in 2018 to **3.6 million** in 2030, **double** the rate of **growth** of the **population** as a whole

- Canada will face **increasing international competition** for **talent** from emerging economies

- 38% of respondents in **aerospace** industry said **recruitment** was a **major challenge**
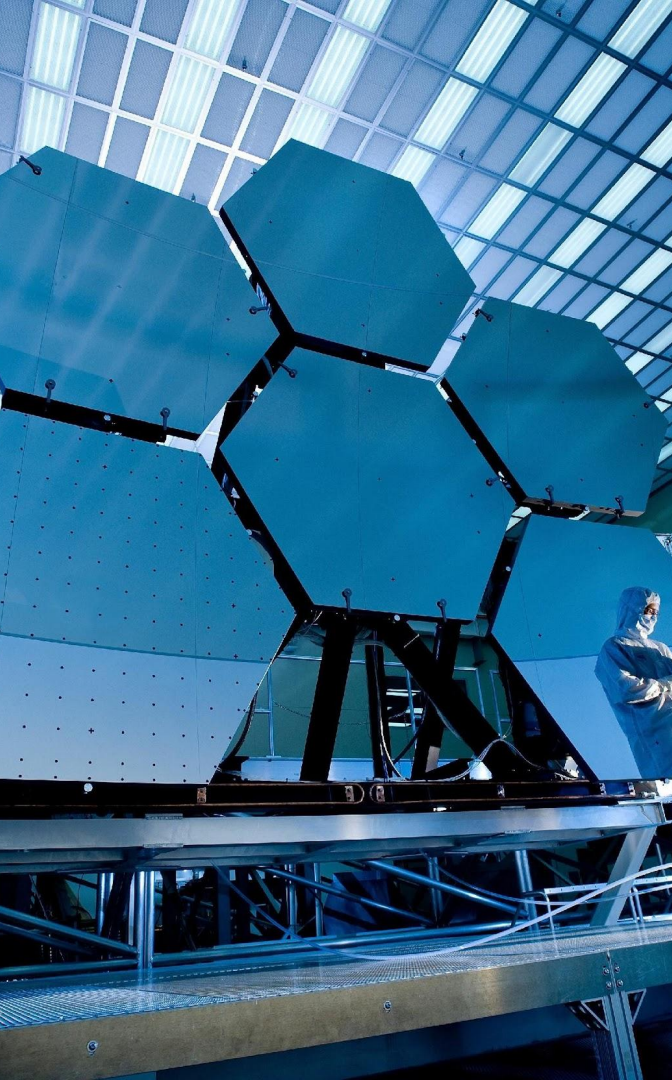
Diversity and inclusion drives innovation

- **85% of executives** agree that **diversity** is key to **driving innovation** in the workplace (Forbes, Xerox, etc.)

- **More diverse** firms are more innovative generating **more income** derived **from new products** and services

- A 2018 Boston Consulting Group study found that companies that have more diverse management teams have **19% higher revenue due to innovation**

Diversity and inclusion advances organizational performance

- A 2020 study by McKinsey & Company finds that companies with diverse leadership **outperform others** in their industries on profitability **by 30%**

- Workers employed in **industries** requiring complex problem solving saw the greatest **productivity benefits** from diversity

- Board **gender diversity improves** employee **productivity** across sectors, **including finance**

- The impact of **board diversity** is **non-linear** - simply having a woman on the board is not enough. A **critical mass** of women board members is required to increase firm financial performance

- Companies with **above average diversity** scores have **19% higher revenues** from innovation than those with **below average diversity scores**

DEI IN THE AEROSPACE & AVIATION INDUSTRIES

- Despite many positive actions, Aerospace and Aviation still lack diversity

- The Canadian population is increasingly diverse

- The problems are not just in the industry, a leaky STEM pipeline remains a problem

Timeline of inclusion

- 1929 Elsie MacGill becomes first woman to earn a degree in aeronautical engineering

- 1959 Molly Reilly becomes first Canadian woman to be rated commercial captain

- 1973 Rosella Bjornson is first Canadian woman first officer for an airline

- 1989 Jane Foster and Deanne Brasseur become first Canadian women fighter pilots and only women fighter pilots in the world at the time

- 1992 Roberta Bondar becomes first

Snapshot of aerospace & aviation industry workforces

- Workforce is aging, 45.6% of aerospace workforce is 45 years or older

- 70% of future hiring in aviation and aerospace is projected to be caused by retiring workers

- The industry needs up to 55,000 new workers by 2025

- The aerospace workforce is highly educated with 72% having post-secondary education, 18% above the Canadian average

Aviation & aerospace workforce diversity profile

- Lack of workforce diversity is a global concern for the aerospace industry
    - Only 10% of aerospace workforce in the U.S. is Black
    - Roughly 5% of commercial pilots globally are women

- Indigenous peoples make up 3% of Canadian aviation and aerospace workforce

- Immigrants are overrepresented in Canadian aerospace, making up 26% of industry's workforce compared to 23% of general workforce.

Women in aviation & aerospace

- Only 30% of workforce in aerospace and aviation is made up of women compared to 51.2% of the general workforce
  - Only 7% of pilots are women
  - Only 6% of mechanics are women
- 80% of women in aerospace are concentrated in administration
  - Women make up 12% of trades
  - Women make up 20% of scientific & technical jobs

Women on boards and senior management

|	Air Canada	Porter	Cargojet	Canadian North	Jazz Aviation
Overall	42.4%	41.8%	13.6%	40.0%	33.4%
Board of Directors	33.3%	0.0%	20.0%	14.3%	30.0%
Senior Management	33.2%	0.0%	27.3%	0.0%	0.0%
Middle Management	45.8%	71.4%	23.5%	41.7%	52.4%

Women in STEM

- A commonly used metaphor is that of "leaks" in the STEM "pipeline"

- Gulfstream says less than 20% of applications for engineering roles are submitted by women

- Women are lost from the pipeline at various points:

  - Between high school and undergraduate studies;

  - Over the course of undergraduate studies;

  - Between undergraduate and graduate studies;

Progress on representation remains uneven

- Despite extensive research and a high degree of policy concern, Canada's progress on improving women's representation in STEM has been uneven

- Only 20% of graduate students and 23% of undergraduates in TMU's aerospace engineering program are women

- In 2016, women's representation among Canadian-educated STEM bachelor's degree holders was 36% for 30-year olds, similar to the 37% share for 40-year-olds, though both figures were higher than women's 22% share for 65-year-olds,

- In addition, administrative data from Canadian universities and colleges found that women's share of enrolments in STEM degree

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Percentage of women in first year STEM university programs

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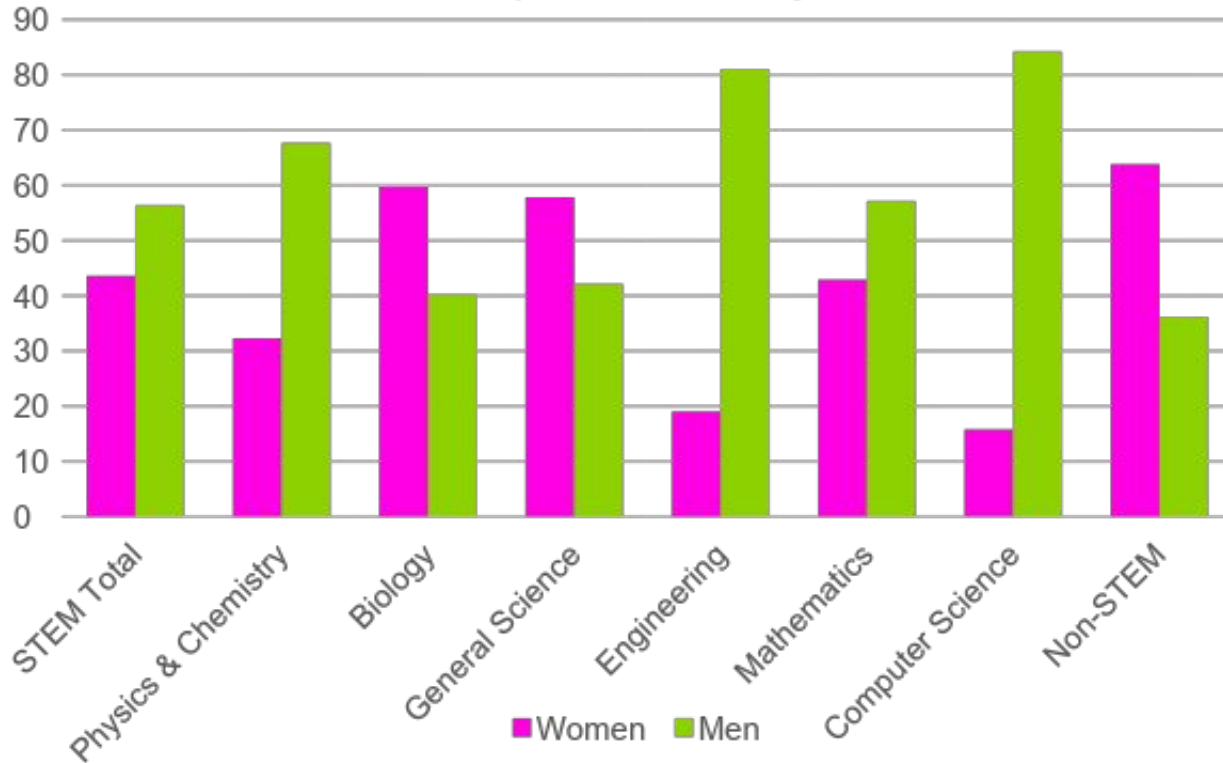
Persistence of women in STEM degrees

	First Year	Second Year	Third Year	Fourth Year	Fifth Year

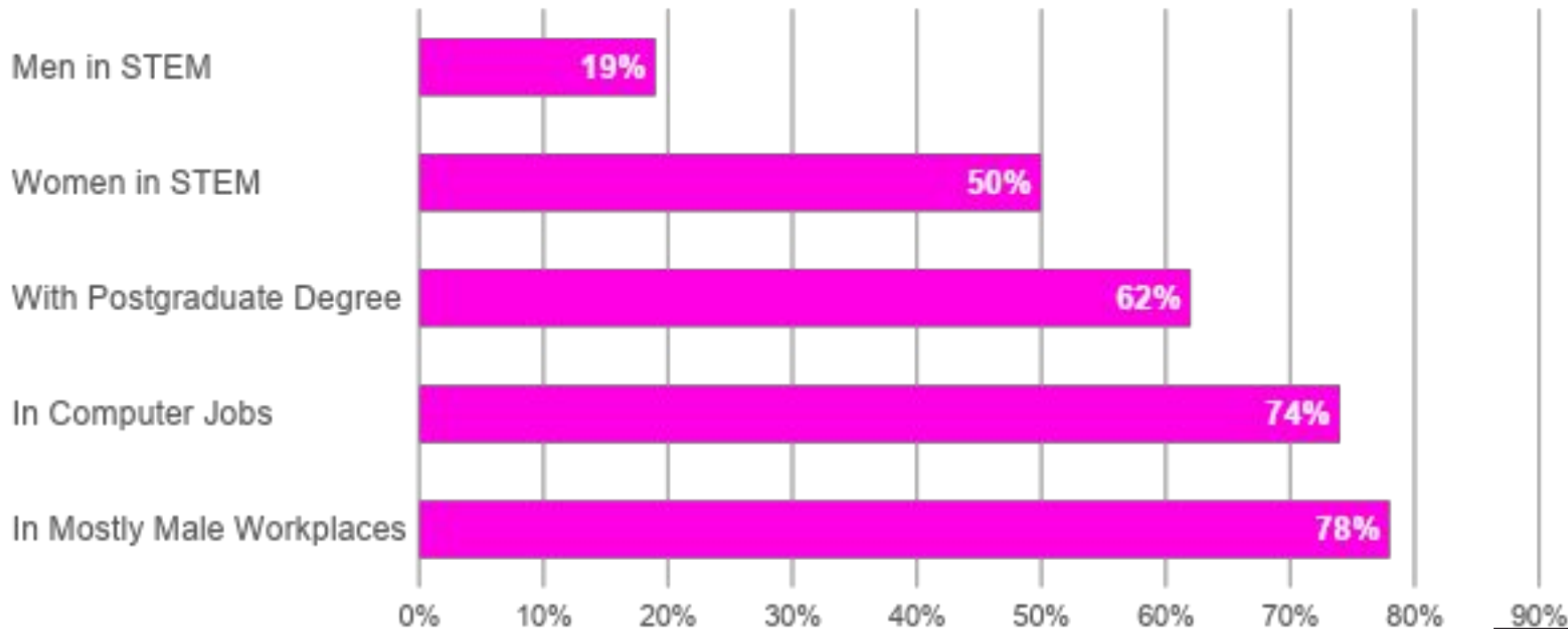Women — Men
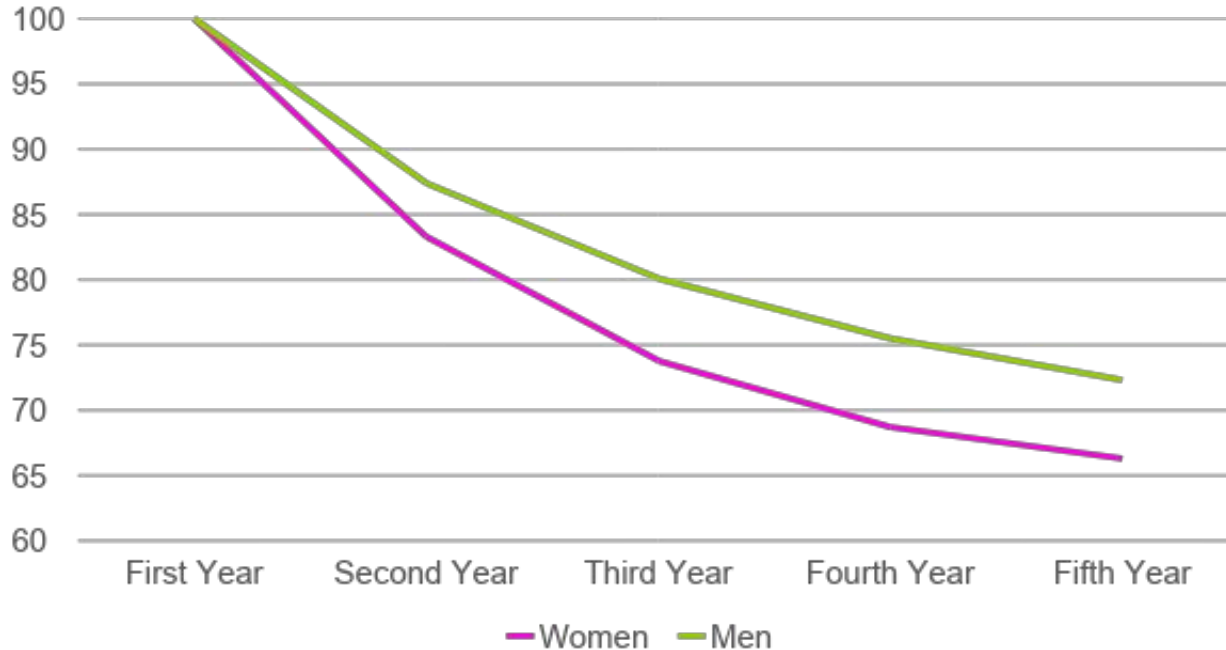
Perceptions of DEI in aerospace & aviation

- A recent survey showed that **81%** of **non- racialized** individuals said **DEI** is a **priority** for their employer

- Only **68%** of **racialized persons** said the same

- **88%** of **women** said DEI was a a strategic priority, compared to **83%** of **men** and **71%** of **racialized persons**

- Only **46%** of respondents in the industry said that **DEI** was stated in their **company's mission**, vision or values

- **Aviation** culture has often **resisted** the **inclusion** of women

Implementation of DEI best practices is uneven

- Only **38%** of employees in aerospace industry reported receiving **anti-harassment** training, **15%** reported implementation of **employee resource groups** and **11%** had undergone **unconscious bias** training

- **36%** of interviewees in a recent study of the aerospace industry said their company has **DEI metrics** and only **34%** said their company **compares representation** in leadership with the rest of the company.

- There is a focus in aerospace companies on measuring the share of women and men, with large companies being more likely than SMEs to have sophisticated metrics

Discrimination as a barrier
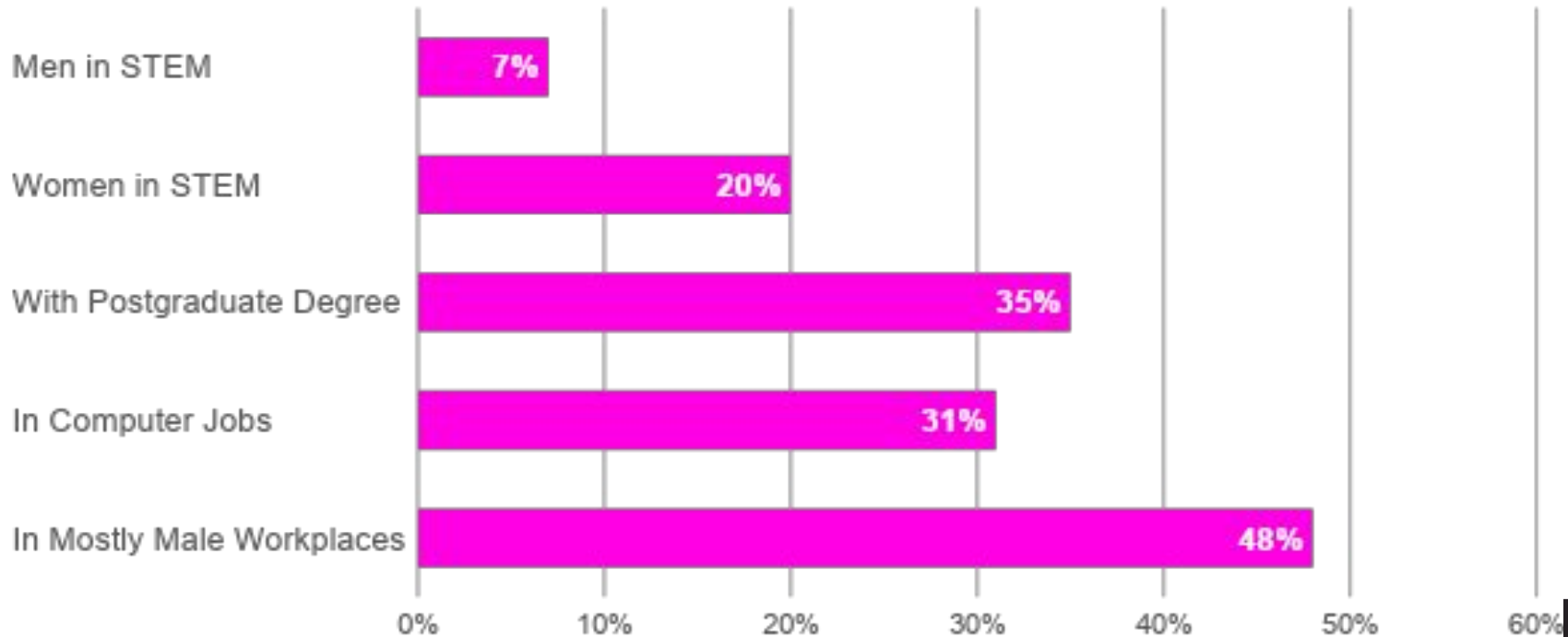
% Having experienced gender discrimination at work

Category	Percentage
Men in STEM	19%
Women in STEM	50%
With Postgraduate Degree	62%
In Computer Jobs	74%
In Mostly Male Workplaces	78%

Gender as a barrier

% that found their gender made it harder to succeed at work

Men in STEM	7%
Women in STEM	20%
With Postgraduate Degree	35%
In Computer Jobs	31%
In Mostly Male Workplaces	48%

0%   10%   20%   30%   40%   50%   60%

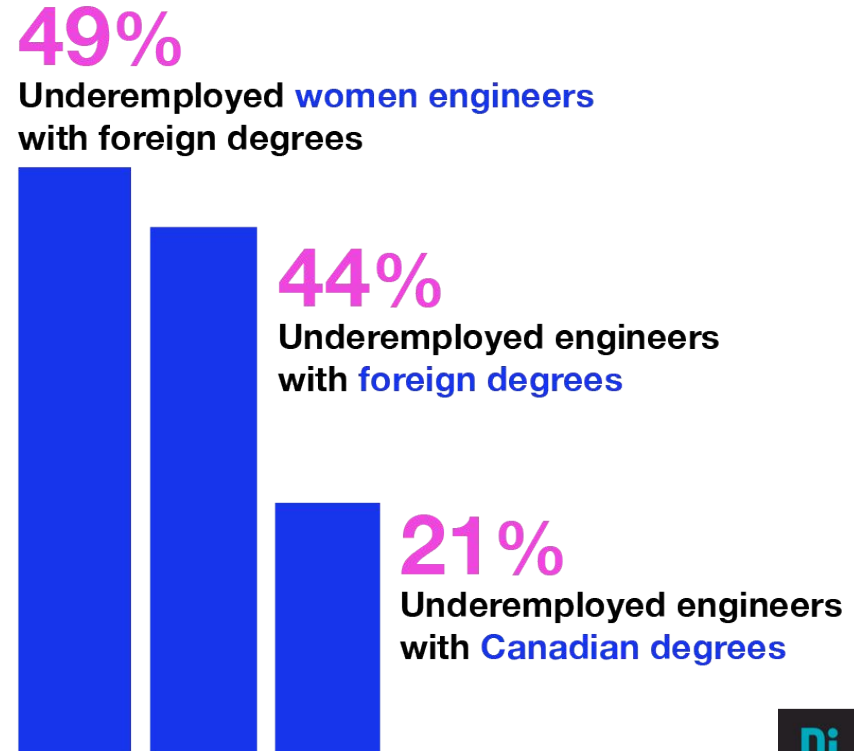# Roadblocks to inclusion for women

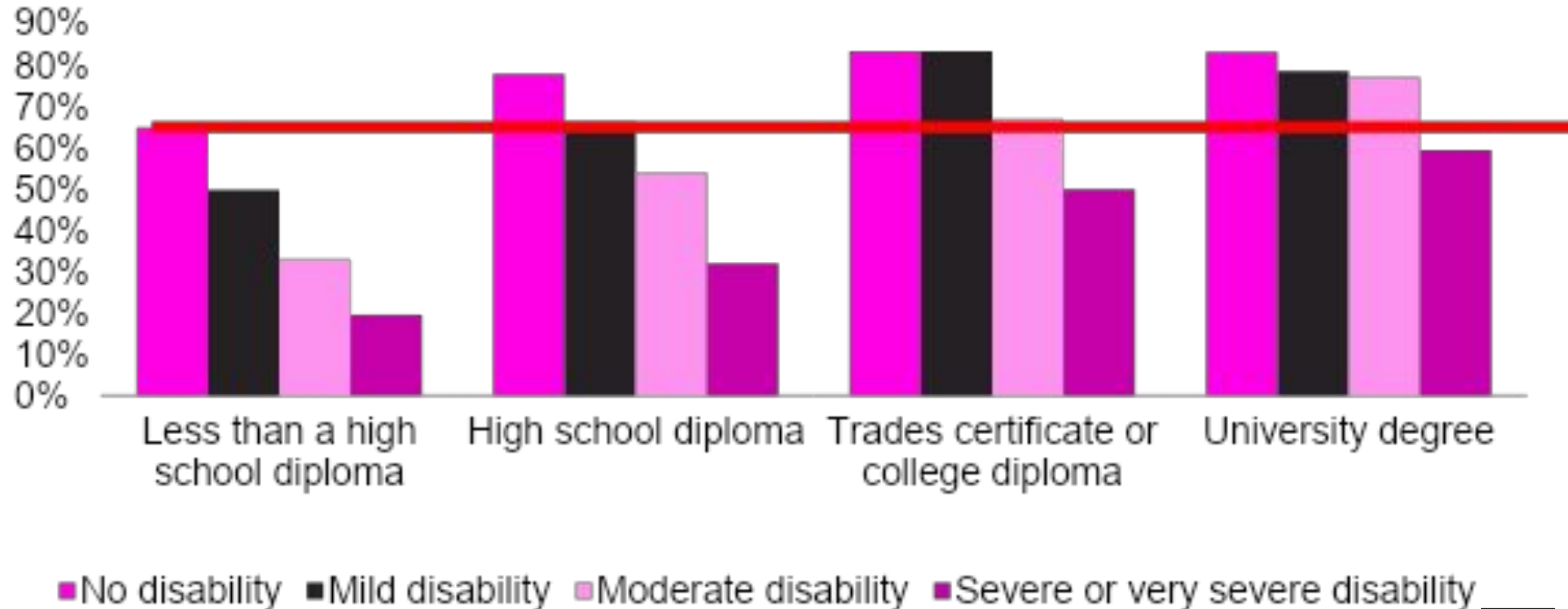| Roadblock	Definition	Frequency
Gender Stereotyping and Microaggression	Biased language, non-verbal or verbal microaggressions, and feelings of not	46%
Lack of Transparency and Barriers to Promotion	Lack of transparency and access to employee networks combined with favouritism and silos.	27%
Unsupportive Work Environment	Male-dominated culture, unsupportive management, undervalued, and alone.	19%
Unclear or Obstructed Career Path	Lack of mentorship or valuable guidance/resources on career options or trajectory.	19%

Internationally trained immigrants

Foreign degree holders are more likely to be underemployed

In 2015:

- **44%** of engineers with foreign degrees were underemployed, compared with 21% of Canadian degree-holders

- This increases to **49%** for women with foreign engineering degrees

QSPE – 2015

49%
Underemployed **women engineers** with foreign degrees

44%
Underemployed engineers with **foreign degrees**

21%
Underemployed engineers with **Canadian degrees**

Employment Rates of Persons Living with Disabilities

Legend: ■ No disability ■ Mild disability ■ Moderate disability ■ Severe or very severe disability
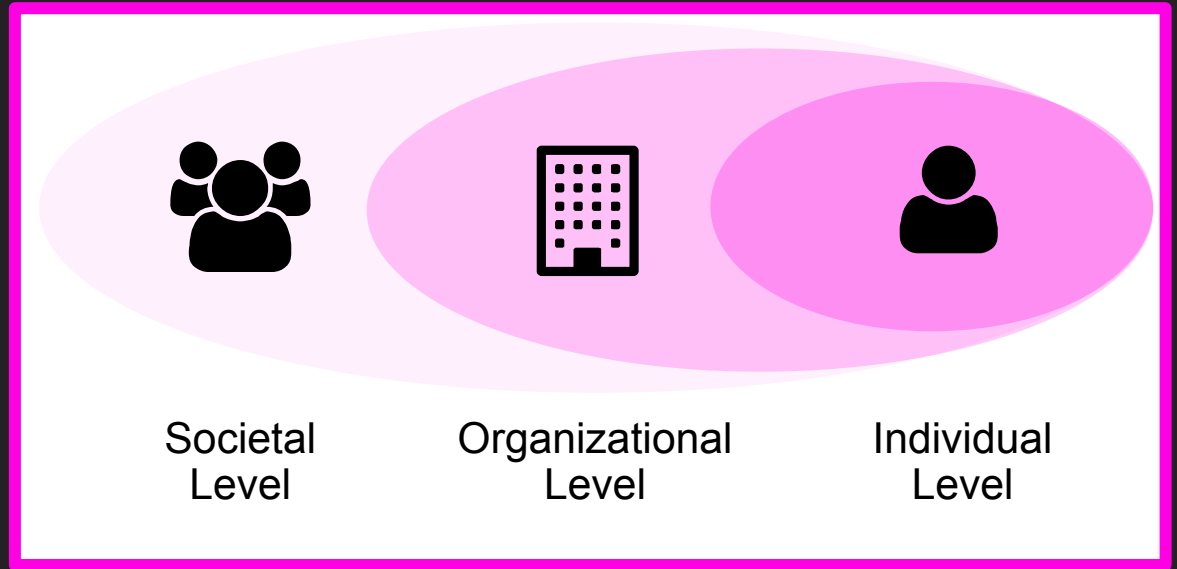
Source: Statistics Canada - 2014

THE WAY FORWARD

The Ecological Approach to Change

Applied to understand barriers/drivers and interventions across multiple levels, our **action-oriented, evidence-based approach** is driving innovation across sectors.

Societal Level

Organizational Level

Individual Level

Di

Societal level

- Assumptions and stereotypes eg. "Think pilot. Think male."

- Legislation & regulation – employment equity, pay equity, accessibility, human rights, "comply or explain."

- Governance: standards for practice, recognition of credentials.

- Representation, celebrating successes and challenging stereotypes

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# Setting the tone from the top: The 50 - 30 Challenge

To date, almost 2000 organizations have signed up including many business associations, chambers and SMEs who can access opportunities and supports

Goals: Gender parity ("50%" women and/or non-binary people) AND significant representation of other equity-deserving groups* ("30%") on your board AND/OR in senior management

Equity-deserving groups include:

- Racialized, Black, and/or People of Colour ("Visible Minorities")
- Persons with disabilities (including invisible and episodic disabilities)
- 2SLGBTQ+ and/or gender and sexually diverse individuals
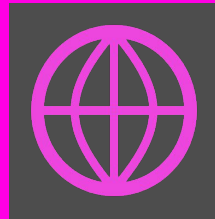- "Aboriginal" or Indigenous Peoples (Metis, First Nations, Inuit)

Organizational level:
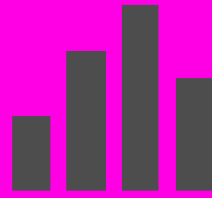**Diversity Assessment Tool**
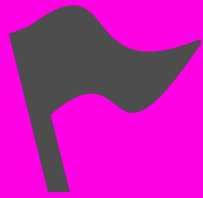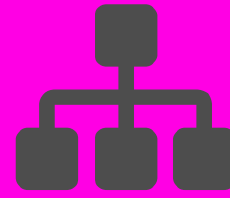
Leadership & Governance

Human Resources Practices

Culture & Values

**EDI Measurement & Tracking**

Diversity across the Value Chain

Outreach & Expanding the Pool

Leadership & Governance

- Set targets and accountability frameworks;

- Understand the strategic importance of DEI

- Formalize processes

- Challenge assumptions about skills: Corporate Boards should look at Nonprofits; Professions.

- Mandatory training and policies;

- Challenge cultural norms;

- Embed it into quality and risk frameworks;

- Monitor and evaluate;

- Eg. Bombardier set a goal for women to hold at least 30% of its board director seats and at least 25% of
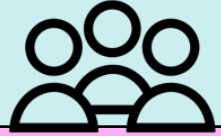
It's not the pool. It's the policies and practices.

If you cannot find qualified diverse candidates, you are not looking hard enough.

Recruiting Board Members

- **Go beyond traditional sources to attract qualified diverse talents for board members.**

  - Work with local organizations and communities to identify board members who could bring diversity.

  - Consider hiring firms that have ties to organizations serving equity seeking groups.

  - Identify members who have connections to local communities, and specifically to organizations that serve equity seeking groups.

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Human resources processes

Recruitment → Selection → Training, Retention, Promotion → Separation

Defining Skills

- Reframing skills assessments can help recruit more diverse candidates
- Important differences between skills, techniques, and tools
- Significant issues around definition and assessment of skills
- Women and diverse job seekers are disadvantaged by systemic barriers and bias
- Not just a supply side issue: employers are "looking for skills in all the wrong places"

Skills = Developed Capacities

Techniques = Specific Approach

Tools = Software/ Program

Assessing skills and competencies

Tools to help enhance current assessment methods in order to improve the opportunities for applicants trained in other countries:

- Self-Assessments

- Written Examinations

- Demonstrations and Observations

- Portfolios

- Oral Questioning

Fix the pipeline

1. Set a goal for getting more women into first-level management.
2. Require diverse slates for hiring and promotions.
3. Put evaluators through unconscious bias training.
4. Establish clear evaluation criteria
5. Put more women in line for the step up to manager.

Selection and retention best practices

Selection

- Formalize and regularly review recruitment and selection procedures to ensure no applicant is discriminated against.

- Interview guidelines with standard questions and standard formal evaluation system to reduce biases.

- Selection committees featuring diverse members who receive anti-bias training.

Training, Retention, and Promotion

- EDI training formalized in policies and procedures;

- Performance appraisal systems;

- Formal mentoring/ coaching programs;

Separation practices

- Exit interviews for evaluating employees' reasons for leaving, experiences, and general feedback.
- Track diversity in exit interview data.
- Results of exit interviews are acted upon.

Organizational culture

- Equity, diversity and inclusion policy and statement of values which is **communicated** and **understood** through the organization.

- A **gender** and diversity **lens** to social events and celebrations.

- Diversity and inclusion policies including anti-discrimination, harassment and bullying, accessibility as well as grievance and disciplinary procedures and a code of ethics, and applies to all facets of the entity and all workers.

- Inclusive paid parental leave policies, health care and family care provisions. 37

Benefits of mentorship are well documented

- 43 studies published over the last 30 years found a positive correlation with the career outcomes of mentored vs. non-mentored employees

- Those with mentors received **higher compensation**, a **greater number of promotions**, felt more **satisfied and committed to their career** and were more likely to believe they would **advance**

- Furthermore, 76% of people view mentors as important to their overall success

Employee networks

- Building an app for a **coordinated network** of WiS to actively connect with one another.

- Creating a "club" or "Slack for Women" to access support internally.

- Hosting a "**Me to We**" style event in celebration of WiS that includes speakers from the different sectors and welcomes people of all ages and genders to participate.

- **Intersectional** perspectives:

  - Boeing Black Employees Association;

  - Boeing Employee Pride Alliance;

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Measurement

"What gets measured gets done."

PETER DRUCKER
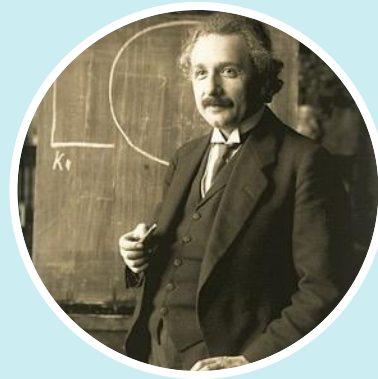
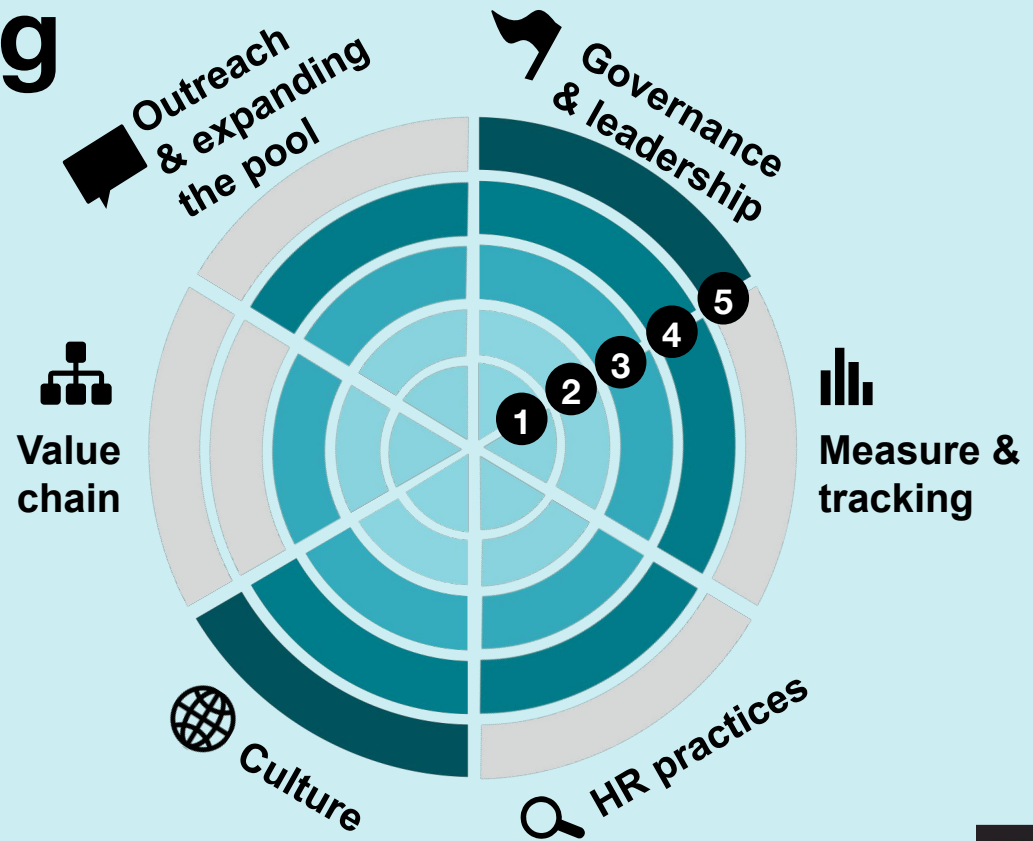*"Not everything that counts can be measured. Not everything that can be measured counts."*

ALBERT EINSTEIN

Benchmarking

Example of Level 4 average

Levels

1 / **2**	Minimal & Regulatory Compliance
3	Foundational Demonstration
4	Advanced Implementation
5	Strategic Integration

Outreach & expanding the pool

Governance & leadership

Value chain

Measure & tracking

Culture

HR practices

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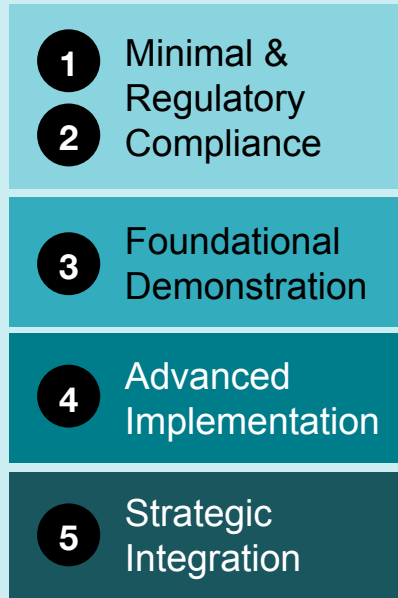
Mainstreaming diversity through the value chain

PRIMARY ACTIVITIES
- Inbound Logistics
- Operations
- Outbound Logistics
- Marketing & Sales
- Service

SUPPORT ACTIVITIES
- Procurement
- Technology Development
- Human Resource Management
- Firm Infrastructure

Value
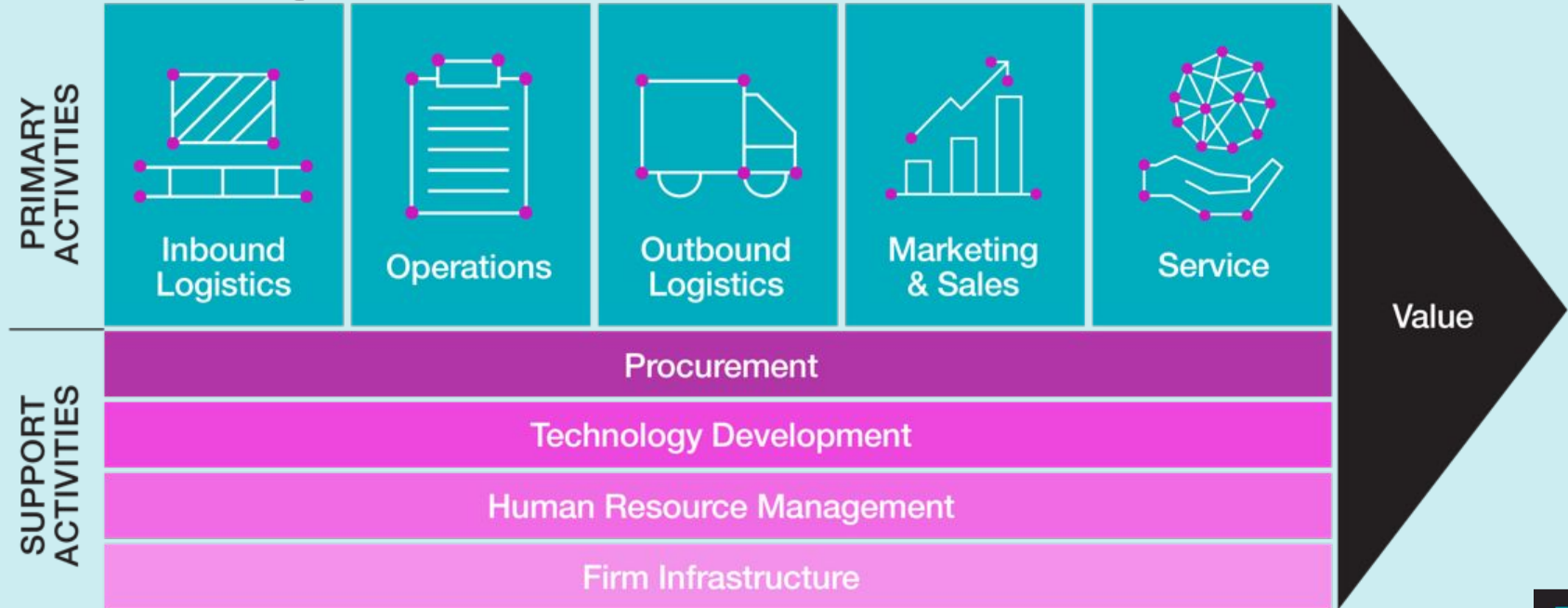
Outreach & growing the pool

- Identify new partners and **Diversify the roster** of collaborating organizations to attract diverse talent

- Assess partner organizations – who are your partnerships with? Are they composed of diverse people?

- Proactively **reach out** to schools and community

- Conduct **strategic partnerships** with organizations that can provide the know-how and connections to **underrepresented groups**

- Bring **inclusive design** principles into outreach and capacity building initiatives by inviting **representatives** from **diverse stakeholder** groups to join in the process

Role Models

- Channels and campaigns that showcase women, their career paths, experiences, and "**how they did it**"

- Eg. P&W has **outreach** program encourages employees to volunteer to bring STEM **awareness** and education to schools, partnering with educational groups like FIRST Robotics and Girls Who Code

- Remember **intersectionality**: Canadian Women in Aviation Association created new communities: Canadian Aviation Pride (CAP) and Black Aviation Professionals Network (BAPN)

Individual Level

- Self awareness and empowerment. Reflect on where your biases may advantage of disadvantage others: whom do you associate with, whom do you avoid?

- Recognize discrimination, bias, micro aggressions

- Have a mentor, be a mentor

- Apply the same rigor to your assessments of people that you apply to your craft

- **Don't be a bystander**

- **Use your sphere of influence to create change**

- Track training and participation levels
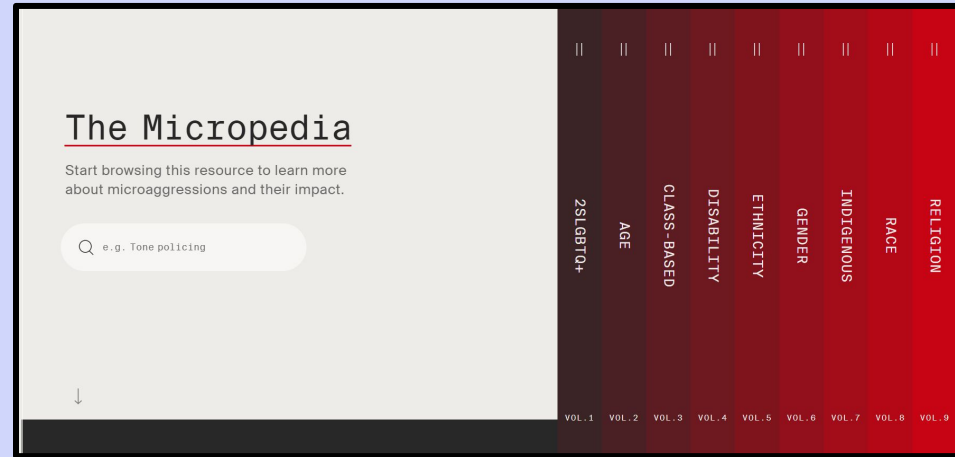
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Privilege Checklist Exercise

❑ My parents both speak English.

❑ At least one of my parents went to University.

❑ My family was able to cover most of the costs of my education.

❑ I can wear, or dress in secondhand clothes, or not answer letters, without people attributing these choices to the bad morals, the poverty, or the illiteracy of my race.

❑ I am never asked to speak for all the people of my racial group.

❑ I can take a job without having my coworkers suggest that I am a token.

❑ I have never lied about or deliberately concealed my ethnicity or religion.

❑ I can speak in meetings and expect that my views will be considered.

❑ I have never been subject to a racial, ethnic, or religious slur

❑ No one has ever expressed surprise or disbelief that someone "like me" is articulate, well-educated or in a position of authority.

Be an Effective Ally to Combat Unconscious Bias in the Workplace

- Understand your privilege and the entitlements you take for granted

- Listen to the experiences of those who you are trying to help as an ally

- Show up, encourage, and support the voices of the underrepresented

- Mentor, train, and provide resources

- Educate yourself on the experiences of those you are trying to help

- Apologize when you make a mistake

- Ask questions:

  - What can I do personally to help amplify marginalized voices?
  - What do I have that can be leveraged

Resource: The Micropedia of Microaggresions

- Everyday snubs and insults that marginalized groups face, often very subtle comments or actions that come from implicit bias and/or stereotypes

- Might seem like a compliment ("You're beautiful for a transgender girl"), a harmless comment ("Where are you really from?"), or a subconscious action (crossing the street to avoid a racialized person)

The Micropedia

Start browsing this resource to learn more about microaggressions and their impact.

🔍 e.g. Tone policing

2SLGBTIQ+ | AGE | CLASS-BASED | DISABILITY | ETHNICITY | GENDER | INDIGENOUS | RACE | RELIGION

↓

VOL.1 VOL.2 VOL.3 VOL.4 VOL.5 VOL.6 VOL.7 VOL.8 VOL.9

Thank You

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